

DOCUMENT RESUME

ED 183 640

UD 020 231

AUTHOR McClendon, McKee J.: Pestello, Fred P.
TITLE Public Opposition to Busing: A Multivariate Analysis.
PUB DATE Aug 79
NOTE 30p.: Paper prepared for the meetings of the American Sociological Association (Boston, MA, August 27-31, 1979): Not available in paper copy due to reproduction quality of original document

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS *Bus Transportation; *Community Attitudes; Community Surveys; Costs; Elementary Secondary Education; Racial Attitudes; Racial Discrimination; *Research Methodology; *School Integration; *Statistical Analysis

IDENTIFIERS Ohio (Akron)

ABSTRACT

The majority of variables which have been investigated as potential causes of opposition to busing have not explicitly dealt with attitudes and beliefs about busing and school segregation. The study described in this paper therefore was designed to explore variables dealing with perceived costs and benefits of busing and perceived racial discrimination in the educational system. Data were collected in 218 telephone interviews conducted with adults residing in Akron, Ohio, shortly after the completion of a school desegregation trial but before a court decision had been reached. The study design involved the inclusion of various questions regarding the respondents' attitudes, in order to produce a less skewed distribution (with respect to opposition to busing) than that found in other busing studies. By utilizing several variables, it was found that a smaller proportion of people unalterably opposed busing for desegregation than would be indicated in a survey which only had one question regarding acceptance of or opposition to busing. It was found that the degree of opposition is related to certain perceived costs and benefits of busing and to a preference for neighborhood schools. These attitudes also mediate the greater opposition of whites and of parents with children in white schools. (Author/GC)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ED183640

JAN 21 1980

**Public Opposition to Busing:
A Multivariate Analysis***

**McKee J. McClendon
Fred P. Pestello**

The University of Akron

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

McKee J. McClendon

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

*Paper prepared for presentation at the 1979 Meetings of the American Sociological Association, Boston, August 27-31. We would like to thank Mohammad Namazi, Bill Blottner, and Wey Hsiao for their assistance in designing and conducting the survey on which this paper is based.

UD020231

Abstract

Using a sample of Akron residents, two strategies are utilized to improve the explanation of public opposition to busing. First, an anti-busing scale is utilized instead of a single busing item, and second, a set of attitudes about the busing issue are used as independent variables. As expected, the independent variables have much greater explanatory power with respect to the busing scale than for the single item. The degree of opposition to busing is related to certain perceived costs and benefits of busing and to a preference for neighborhood schools. These attitudes also mediate the greater opposition of whites and of parents with children in white schools.

Public Opposition to Busing:
A Multivariate Analysis

Widespread public opposition to busing for the purpose of school desegregation has been consistently documented in public opinion polls and other social science surveys. Depending on the wording of the question, nationwide surveys have found from 70 to 85 percent of the public opposed to busing (e.g. Harris Survey Yearbook of Public Opinion, a,b; Gallup; National Opinion Research Center, a,b; U.S. Commission on Civil Rights). Although blacks are much more likely to support busing than whites, even among blacks a sizeable minority are opposed to busing (Harris Survey Yearbook of Public Opinion, a,b; Gallup; National Opinion Research Center, a,b). The only survey indicating less than a monolithic opposition to busing found that many of those who are generally opposed to busing may support busing under certain circumstances (U.S. Commission on Civil Rights).

While the existence of a widespread opposition to busing among whites is clear, the causes, or even correlates, of this opposition are not well understood. This study will attempt to improve our ability to explain this phenomenon.

Many social and political commentators, as well as members of the black community in general, feel that opposition to busing reflects a white opposition to school integration (Kelley). However, the evidence indicates that white attitudes toward school integration, and racial integration in general, have been steadily improving during the last two decades (Taylor, et al.). Today, a majority of whites give pro-integration responses to several commonly used questions concerning school integration, neighborhood integration, interracial contact in the home, and racial intermarriage (Taylor et al.; Kelley). The responses to these questions suggest that only a small

part of opposition to busing could be due to opposition to integration in general and school integration in particular.

Kelley's careful analysis of a national sample of whites found only very weak relationships between various racial attitudes and busing opposition. He concluded that unfavorable racial attitudes (referred to loosely as racism) were not the cause of opposition to busing, and similarly, that racism and opposition to busing are not part of the same attitude syndrome. Using somewhat different measures of racism, Kelley's conclusion was confirmed by Stockton and Wayman in a study of Dearborn, Michigan residents. These studies strongly suggest that the explanation for busing opposition is not the anti-integration attitudes and other racial prejudices of whites.

The search for other explanatory variables has resulted in a number of significant associations of only modest explanatory power and several findings which are in conflict with one another. Kelley found little evidence that opposition to busing is related to conservative attitudes on several political and social issues whereas Stockton and Wayman found a number of conservative attitudes to be significantly correlated with busing opposition. However, in the latter case the associations were all relatively small in magnitude.

Basic demographic characteristics have not proved to be very fruitful explanatory variables. Kelley as well as Stockton and Wayman found more educated persons to be significantly less opposed to busing but the associations were weak. Conflicting findings exist with respect to the effect of children in school. Kelley found no relationship while Nicoletti and Patterson found parents of school children to be more opposed to busing than persons without children in school.

Although, as indicated above, many studies have shown that whites are more opposed to busing than blacks, none have looked at the effect of race while controlling for other potentially important variables. This points up a weakness of much of the research on busing. Only Kelley has analyzed the effect of all variables simultaneously in a single statistical model. Thus, many of the reported zero-order associations are potentially spurious and, with the exception of Kelley's study, measures of the overall explanatory power of a set of variables are not available.¹ Kelley's multiple regression equation, which contained 16 independent variables, explained only eight percent of the variance in busing. Although his measure of racism was not included in the equation, the zero-order correlation with busing indicating that its inclusion would probably have increased the explained variance by four percent at most.

The great majority of the variables which have been investigated as potential causes of opposition to busing have not explicitly dealt with attitudes and beliefs about busing and school segregation. Since the existing research has been relatively unsuccessful in improving our understanding of anti-busing attitudes, in this study we decided to concentrate on variables dealing with perceived costs and benefits of busing and perceived racial discrimination in the educational system. There are a few precedents in the research literature which suggest the potential fruitfulness of such an approach. It has been found that persons who believe that desegregation and busing are harmful to children's education are more likely to oppose busing than those who do not believe it will be harmful (Nicoletti and Patterson; Wall; U.S. Commission on Civil Rights). There is also some evidence that persons who think busing will cause a large increase in school costs and that busing children is more dangerous than letting them

walk are more likely to oppose busing (Wall; U.S. Commission on Civil Rights). Open ended questions have suggested that opponents of busing feel that busing will disrupt the neighborhood school concept while busing proponents think that it will improve communication between the races (Nicoletti and Patterson). Although the explanatory power of these beliefs about the consequences of busing cannot be determined from these studies, the direction of the reported associations suggest that the systematic utilization of a cost-benefit model may lead to a better understanding of opposition to busing. Such a cost-benefit approach forms a major part of our analysis.

Data

The data to be analyzed in this paper consist of 218 completed telephone interviews with adults residing within the city limits of Akron. The interviews were conducted during November of 1978, shortly after the completion of a school desegregation trial in Akron, but before the court had reached a decision. Respondents were randomly selected from the Official Akron City Directory.

It is often argued that random digit dialing should be used to overcome potential biases due to the omission of unlisted and new telephone numbers from directories. Rich, however, has recently shown that the use of telephone directories leads to little or no bias with respect to basic demographic and socioeconomic characteristics for the nation as a whole and for the state of California. On the assumption that Rich's findings at the state and national level would be valid for Akron as well, we chose the simpler and less time consuming method of directory sampling.

Since we limited our sample to the inner city of Akron, we must be cautious about generalizing our findings to the entire nation or to other urban areas. Restricting the analysis to an urban area is not necessarily a disadvantage, however. Kelley found that the urban-rural dimension was not associated with attitudes on busing. Thus the restriction of range on variables correlated with the urban-rural dimension that results from using only an urban population should not cause an attenuation of correlations with busing. Kelley also points out that a national sample will include many respondents (e.g., rural and small town) for whom the busing issue is not directly relevant. Restricting our analysis to an urban population should thus increase the policy relevance of the findings. For this reason we excluded the residents of suburban communities in the Akron area since the school desegregation suit only pertained to the Akron Public Schools.

Our analysis will include both blacks and whites as well as respondents with and without children currently attending the public schools. Blacks comprised 17 percent of the sample and 32 percent of the respondents had children in the public schools.

Variables

As indicated above, previous research has only explained a small proportion of the variance in attitudes toward busing. The strategy adopted in this study to improve the explanatory power involved changing the way the dependent variable is measured and changing the nature of the independent variables. Most studies of busing have asked only a single very general question about the respondent's support for or opposition to busing. As noted above, these questions have produced

highly skewed response distributions consisting of a large majority of respondents in opposition to busing. When a variable is highly skewed, it is normally quite difficult to find substantial associations with other variables which usually are more symmetrically distributed. In addition, a single item is usually a less reliable measure of an attitudinal dimension than a scale constructed from several items.

Doubting the adequacy of a single question as a measure of opposition to busing, the U.S. Commission on Civil Rights found that upon further questioning, many respondents who were generally opposed to busing (as indicated by a single item), would actually support busing under certain conditions. Thus, the use of further questions produced a less skewed and more varied distribution with respect to opposition to busing. These considerations lead us to construct the following items as our measure of opposition to busing. The response distribution is given in parentheses following each question.

1. In general, would you favor or oppose the busing of black and white school children from one school to another in Akron? (13.8% favor, 84.9% oppose, 0.9% not sure, 0.5% other)

2. If the courts found that the Akron school officials had intentionally contributed to racially segregated schools, would you favor or oppose busing? NOT ASKED IF RESPONSE TO 1 WAS FAVOR. (12.3% favor, 79.8% oppose, 5.8% not sure, 2.1% other)

3. If busing were only used as a last resort, would you favor or oppose busing? NOT ASKED IF RESPONSE TO 2 WAS FAVOR. (20.6% favor, 75.7% oppose, 3.0% not sure, 0.7% other)

4. Would you favor a law that would prohibit busing? NOT ASKED IF RESPONSE TO 3 WAS FAVOR. (77.0% favor, 18.2% oppose, 4.7% not sure)

Item number one is a general measure of busing which was designed to be very similar to the item used by Kelley. The proportion generally opposed to busing in Akron (85 percent) is very similar to that found in other national and local surveys which used similar items. The proportion of blacks opposing busing (63 percent) is significantly less than for whites (89 percent). However, the majority opposition to busing in our Akron sample of blacks is higher than that reported for national surveys using a similar question (e.g. 43 to 48 percent, Kelley). Rather than attempt to interpret the rather sizeable black opposition, we would point out that our black sample size is only 38, and that the 95 percent confident interval is 47-79 percent.

Items two through four were designed for the purpose of decreasing the proportion who are unalterably opposed to busing. The items were modeled after, but not identical with, a three step series of questions used by the U.S. Commission on Civil Rights. The anti-busing response on each successive item reflects an increasing strength of opposition to busing, or so we reasoned. The four items were constrained to form a Guttman scale. If a respondent indicated that he favored busing on any one of the items, the respondent was not asked the subsequent questions. The respondent's score on the four item scale measuring opposition to busing was computed by counting the number of items on which the respondent opposed busing. Thus, scores ranged from zero to four, with a four indicating opposition to busing on all four items.

As indicated by the fact that a small proportion favored busing on questions two and three, and an additional small proportion opposed an anti-busing law (question four), many respondents are not categorically opposed to busing. Although 77 percent of those who were asked if they would favor a law that would prohibit busing responded that they would, these persons are only a minority (46 percent) of all respondents. It is clear that the four items provide a less skewed, more varied, and hopefully more reliable measure of opposition to busing than the single dichotomous item one.

The strategy used in designing independent variables was to create items as closely related to the busing issue as possible. With this goal in mind, the following items, dealing largely with beliefs about busing and the need for busing, were constructed. The response distributions are again given in parentheses.

1. Would busing increase the Akron school costs by a great amount, some but not greatly, or little or none? (61.0% great amount, 23.9% some, 6.9% little or none, 7.8% don't know, other 0.5%)

2. As far as accidents are concerned, do you think that busing school children is safer than walking, that walking is safer than busing, or that there is little or no difference. (29.8% busing safer, 19.7% walking safer, 39.4% little or no difference, 9.6% don't know, 1.4% other)

3. Do you think that children who had to be bused would be very upset, somewhat upset, or not upset at all about leaving their schools? (36.7% very upset, 45.9% somewhat upset, 9.2% not upset, 5.5% don't know, 2.8% other)

4. If it were decided to bus your children to a school in a (black/white) neighborhood, would your children's safety worry you a lot, some but not a lot, or not at all? (46.8% a lot, 34.9% some, 14.2% not at all, 3.2% other)

5. In your opinion, would busing hurt the education of white children, improve their education, or make little or no difference? (20.6% hurt, 6.0% improve, 68.8% little or no difference, 3.2% not sure, 1.4% other)

6. Would busing improve the education of black children, hurt their education, or make little or no difference? (28.4% improve, 10.6% hurt, 53.7% little or no difference, 4.1% not sure, 3.2% other)

7. In your opinion, would busing help black and white children to get along better, lead to trouble, or make no difference? (38.1% get along better, 18.3% lead to trouble, 34.9% no difference, 5.0% not sure, 3.7% other)

8. Do you think the Akron school board and administration are partly to blame for segregation in the schools or is the segregation due entirely to the fact that blacks and whites tend to live in different neighborhoods? (12.8% school officials, 73.9% neighborhood segregation, 4.6% both, 7.3% don't know, 1.4% other)

9. Are the facilities, programs, and teachers in mostly black schools as good as those in white schools? (45.0% yes, 22.9% no, 32.1% don't know)

10. On the average, black students are not doing as well in school as white students. Do you think that this is mostly the fault of blacks themselves or mostly the fault of the schools? (50.9% blacks, 20.2% schools, 12.8% both, 11.5% don't know, 4.6% other)

11. Do you think it is best for children to go to schools in their neighborhoods even if it means that the schools will be segregated? (83.5% yes, 11.5% no, 3.7% not sure, 1.4% other)

12. Who should make the final decision on when it is right to desegregate the schools, the courts or the local communities? (16.1% courts, 78.9% local communities, 3.7% don't know, 1.4% other)

13. Would you yourself have any objection to sending your children to a school where a few (third, half, more than half) of the children are black? WHITES ONLY (4.5% object to few, 1.7% to third, 10.7% to half, 23.6% to more than half, 51.7% would not object to more than half, 7.9% don't know or other)

As indicated by the response distributions given above, there is a small to fairly large proportion of persons on each question who responded don't know, not sure or gave some other response. A frequent way of handling such responses is to treat them as missing values. However, such a procedure is not correct since a "don't know," for instance, means that the respondent does not have an opinion, not that the researcher does not know the person's opinion. Given that "don't know" should be treated as legitimate response and not excluded from the analysis, it is not clear how such a response should be coded. The most common coding of "don't knows" is to assign them a neutral score between the poles of agree-disagree or approve-disapprove. However, we do not think that it is justified to assume that "don't know" means neutrality. In addition, many of our questions do not contain a neutral position among the response categories. Therefore it was decided to code each attitude as a dummy variable. The response category which seemed likely to be the most anti-busing or the least anti-busing was coded one and all other responses were coded zero, including "don't knows" and other responses. For instance, on question one it was hypothesized that the main difference

with respect to opposition to busing would be between those who felt it would increase school costs by a great amount and all other respondents. Thus, the "great amount" response was coded one and all other responses were coded zero. Following each question listed above, the response which was coded one has been underlined.

Questions one through seven are concerned with perceived costs and benefits of busing. We hypothesized that the greater the costs and the less the benefits that busing is perceived to have, the more the respondent will tend to oppose busing. The perceived costs of busing may be financial, physical, emotional and cognitive. If busing is perceived as increasing school costs by a great amount, as leading to more accidents than walking, as being very upsetting to children, as transporting children into unsafe neighborhoods, or as hurting the education of white children, there should be greater opposition to busing. With respect to benefits, if busing is perceived as improving the education of blacks and as helping blacks and whites to get along better, there should be greater support for busing.

The proportion who perceive negative consequences resulting from busing varies considerably from item to item. The majority of respondents (61 percent) believe that busing would be very expensive (i.e., increase costs a great amount) while only a small minority (about 20 percent) feel that busing is more dangerous than walking and that busing would hurt the education of white children. Although the purpose of this study is to assess the consequences of these perceptions, and not their accuracy, the evidence indicates that these perceptions are probably in error (U.S. Commission on Civil Rights). However, if such beliefs are found to increase opposition to busing, then the accuracy of such beliefs has implications for social change.

The response distributions for items three and four show that a substantial minority perceive certain other negative consequences of busing. Over one third (37 percent) feel that bused children would be very upset about having to leave their schools and almost half (47 percent) would worry a lot about their children's safety if they were bused to a school in a neighborhood of the other race. Kelley suggested that anxiety about violence may be a cause of white opposition to busing. Our findings confirm that such a concern exists, but it is not confined to whites; 40 percent of the black respondents would also worry a lot about their children's safety.

Items six and seven indicate that only a minority of respondents feel that busing will lead to the kinds of benefits that are often hoped for. Only about one fourth feel that busing will improve the education of blacks while a larger minority (38 percent) believe that it will help the races to get along better.

While questions one to seven were concerned with certain perceived consequences of busing, items eight to ten, which deal with perceived racial discrimination in the schools, are more concerned with the need for busing. If blacks are perceived to be discriminated against in their educational pursuits, then busing, as one tool to improve the educational opportunities of blacks, should receive greater support. However, if racial discrimination is not perceived to exist, then there would be no need for busing. Thus, if school officials are blamed for racially segregated schools, if black schools are thought to be inferior, or if the schools are blamed for the poorer educational performance of blacks, then there should be greater support for busing. However, the response distributions show that on each of these questions only a small minority of respondents believed blacks had been treated unequally.

Three additional items which should be related to busing are also included. Question eleven asks respondents to choose between two potentially conflicting values, neighborhood schools and integrated schools. Those choosing neighborhood schools should logically be more opposed to busing since busing tends to disrupt the neighborhood school concept. Although busing opponents often cite the disruption of neighborhood schools as a reason for their opposition to busing (e.g., Nicoletti and Patterson), the relationship between opinions about neighborhood schools and busing does not appear to have been investigated in any systematic fashion. Not surprisingly, the response distribution indicates that the great majority of respondents (83 percent) prefer neighborhood schools. Although blacks are less likely to support neighborhood schools than whites, even among blacks a solid majority (63 percent) favored the concept.

Item twelve is included because busing is often perceived as a form of desegregation forced on communities by outside authorities, authorities over which people have little or no control. Thus, those who feel that local communities should have the final say on desegregation should be more likely to oppose busing because it may be perceived as a symbol of a loss of community control over its schools. As expected, a large majority of respondents (79 percent) feel that the community should make the final decision on desegregation.

Item thirteen is one of the measures of racism used by Kelley. It was included in this survey because it measures willingness to accept racial integration in the schools and thus is directly relevant to school desegregation. The item is actually a Guttman scale composed of four questions which were asked of whites only. If the respondent would not object to his children attending school with a few blacks, he was asked if

he would object to a third black, and so on. About half of the whites (52 percent) indicated they would not object to schools that were more than fifty percent black. Since the questions composing item 13 were not asked of blacks, two dummy variables were created from this item so that it could be used in the regression analysis of the total sample of blacks and whites together. Those whites who would not object to schools with more than half blacks were coded one on the first dummy variable while blacks and all other whites were coded zero. On the second dummy variable, whites who would object to more than fifty percent blacks (and those who didn't know) were coded one while whites who would not object as well as blacks were coded zero. When included in the multiple regression equation, the first dummy variable compares whites who are most favorable to integration with blacks and the second dummy variable compares whites who are less favorable to integration with blacks.

In addition to the attitudinal variables discussed above, four additional independent variables were included in the analysis. Two dummy variables were used to represent the racial composition of the respondent's children's schools. The first dummy variable was coded one for parents of children in white schools and the second was coded one for parents of children in black schools. Respondents without children were coded zero on both dummy variables. If the mean percentage black of the schools attended by a respondent's children was less than 30 percent (approximately the percentage of all students in the Akron public schools who are black), the respondent was defined as having children in white schools. If the mean percentage black was greater than 30 percent, the respondent was defined as having children in black schools. It was hypothesized that parents of children in white schools would be more opposed to busing than those with children

in black schools. The remaining two independent variables are the respondent's education (number of years of school completed) and family income. We advanced no hypotheses about the direct effects of either education or income since we felt these effects would be inconsequential when the attitudinal variables were controlled.

Findings

We have conducted separate analyses for the single busing question (item 1), which is similar to the question used in other studies, and for our anti-busing scale. The correlations between the independent variables and the dependent variables are given in Table 1 and the standardized partial regression coefficients (Betas) are given in Table 2.

Tables 1 and 2 about here

As was predicted, the associations between independent and dependent variables are stronger when opposition to busing is measured by our scale than when it is measured by a single item. The correlations for the first twelve attitude items (which are the central focus of this study) with the busing scale are all stronger than the correlations with the single busing item. Some of the correlations increase rather dramatically (e.g. items one, five and seven).

The multiple correlation is also much larger for the busing scale than for the single item. Table 2 gives both the squared multiple correlation R^2 and the adjusted (shrunk) R^2 . For each equation the shrunk R^2 is somewhat less than the observed sample R^2 . This is because the sample R^2 is a biased estimate of the population R^2 . The greater the ratio of the

number of independent variables to the number of cases, the greater will be the bias (see Cohen and Cohen for a discussion of the shrunken R^2). Since we have a relatively high ratio of variables to cases, the adjustment is nontrivial, although not severe. The shrunken R^2 should be treated as the better estimate of the explanatory power of the regression equation. The shrunken R^2 estimates that the set of independent variables explains slightly more than a third of the variance in the busing scale while only explaining 11 percent of the variance in the single busing item. This represents a substantial difference in explanatory power. Because of the greater explained variance and because we feel that the busing scale better reflects the distribution of opinion on busing, our discussion will concentrate mainly on the findings for the scale.

The correlations and regression coefficients for the twelve attitude items are all in the predicted direction. Those who perceive busing to have certain costs and who favor neighborhood schools and the right of local communities to decide on desegregation are more likely to oppose busing. Those who perceive busing to be beneficial and see blacks as being discriminated against by the school system are more likely to support busing. The correlations are also generally higher, for both the single item and the busing scale, than those reported in other studies (e.g. Kelley; Stockton and Wayman).²

Although all but one of the zero-order correlations for the twelve key attitude items are significant at the .05 level, only five of the partial regression coefficients reach this level of significance. Those who believe that busing will increase school costs by a great amount, that busing will upset children a lot, that busing will hurt the education of white children, and those that advocate neighborhood schools are

significantly more likely to oppose busing. Respondents who perceive that busing will help blacks and whites to get along better are significantly more likely to support busing. The beliefs that busing will improve race relations and that neighborhood schools are best have the strongest and most reliable effects. It should be noted that none of the three items dealing with perceived discrimination are significant while four of the seven cost-benefit items are significant. This suggests that a cost-benefit analysis is a fruitful way of looking at busing attitudes, and presumably other public issues as well.

Turning from the findings for the key attitude variables to the other independent variables, it is important to note that neither variable 13.a. or 13.b. is significant. This means that whites, regardless of how willing they are to send their children to school with blacks, are not significantly more opposed to busing than blacks, after controlling for the other independent variables.³ However, when we look at the correlations of both of these variables with the busing scale, we note that both are positive. The partial correlation of 13.a. with the busing scale, controlling for 13.b., is equal to .29, as is the partial correlation of 13.b. controlling for 13.a. This means that both groups of whites are more opposed to busing than blacks. The fact that the racial difference in opposition to busing disappears when we control for the other independent variables means that the set of attitudes that we have specified interprets or mediates the racial effect on busing. The nonsignificant effects for 13.a. and 13.b. also indicate that differences in the willingness of whites to accept black classmates for their children is not related to their support or opposition to busing.⁴ This is consistent with the findings of Kelly, as well as Stockton and Wayman, that there is little or no relationship between racial attitudes and busing attitudes.

The partial regression coefficients indicate that neither parents of children in white schools nor parents of children in black schools are significantly more opposed to busing than persons without children in school. The fact that having children in school is not associated with opposition to busing, after controlling for other variables, is consistent with Kelley's findings. However, the zero-order correlations show that having children in white schools is associated with greater opposition to busing. The partial correlation of the white school dummy variable with the busing scale, controlling for the black school dummy variable, is .20, while the partial correlation for the black school variable controlling for the white school variable is virtually zero. These partials indicate that parents with children in white schools are more opposed to busing than persons without children in school while there is no difference between parents with children in black schools and those without school children. The fact that the effect of having children in white schools disappears when the other variables are controlled means that the attitude variables mediate the anti-busing tendencies of these parents.

Education is not significantly related to opposition to busing. This is true for both the single busing item and the busing scale. This finding is inconsistent with prior research (Kelley; Stockton and Wayman). However, the correlations reported by these studies were quite small.

Last of all, the association of family income with opposition to busing was highly significant. Kelley suggested such an effect but his regression coefficient was small and insignificant. He did offer the interpretation that those with higher income might have more to lose from busing. However, we have controlled for whether the respondent has children in a white school, the type of person who would appear to have the most to lose from

busing. Since we have controlled for so many relevant attitudes, we can only speculate that higher income families may perceive busing as a threat to their economic position.

Discussion

We have found that the explained variance in busing attitudes can be increased by constructing a less skewed measure of the dependent variable and by selecting as independent variables attitudes which are as directly related to the busing issue as possible. Using the shrunken estimate of R^2 , our regression equation still explains about one third of the variance in the busing scale. Although we do not want to exaggerate the explanatory power of our analysis (after all, almost two thirds of the variance is unexplained), it does represent an appreciable increase over previous studies.

Five of the twelve key attitudinal variables have significant effects on the anti-busing scale. It should be noted, however, that each of the twelve variables is related to busing in the predicted direction. This adds validity to our strategy of selecting variables. As a group, the independent variables perform as we expected, even though they do not all reach statistical significance.

With respect to the substantive findings, the degree of opposition to busing is associated with certain perceived costs and benefits of busing, but it is not associated with the perception of racial discrimination in the schools. Those who feel busing will be expensive, will upset children, and will hurt the education of whites are more opposed to busing while those who feel busing will help blacks and whites to get along better are less opposed. The remaining attitudinal item associated with busing

opposition is the belief that neighborhood schools are best. Although the effect of this item is relatively strong, it is somewhat surprising that its effect is not stronger given the central role that the neighborhood school concept has played in public controversies over busing. There is apparently much more involved in opposition to busing than a belief in the superiority of neighborhood schools.

In addition to the main effects of the attitudinal variables, these variables appear to mediate the effect of race and the effect of children in white schools. Although whites and parents with children in white schools are significantly more opposed to busing, these variables are nonsignificant when the attitudinal variables are controlled. The attitudes that we have measured do not mediate the effect of income, however, since persons with higher incomes are more opposed to busing even after controlling for these attitudes.

Although our findings are largely as expected, their policy implications are not entirely clear. The U.S. Commission on Civil Rights (Wall) has argued that the public is badly misinformed on busing and that those who are most misinformed are more likely to oppose busing. Thus the Commission suggests that public education on busing may reduce opposition to busing.

The policy implications of some of the findings from our model, which assumes that beliefs about the costs of busing cause opposition to busing, then the policy implication of some of our findings would be consistent with that suggested by the Commission. Since the evidence indicates that busing does not increase school costs nearly as much as the public assumes (U.S. Commission on Civil Rights) and that busing has seldom lead to lower test scores for whites (St. John), our findings that respondents who perceive these costs

are more opposed to busing would certainly imply that better public information would reduce opposition to busing.

However, the evidence also suggests that there is no necessary relationship between busing and the reduction of racial prejudice and hostility (St. John). Although busing may reduce prejudice under certain favorable conditions of interracial contact, such as those suggested by Allport, these conditions apparently do not exist in many busing programs. Thus busing sometimes leads to no change in prejudice and sometimes may actually increase prejudice (St. John). Better public education on this issue might change the perceptions of those who think busing would help blacks and whites to get along better. Since this belief is related to greater support for busing, better information might actually increase opposition to busing. What we are suggesting is that if people form opinions about busing on the basis of perceived costs and benefits, than public education might work both ways, that is, it may change certain inaccurate beliefs that cause some people to support busing as well as changing erroneous beliefs which lead to opposition.

It is common to point out that correlations do not prove causality. The same is true for partial regression coefficients. Thus it is possible that those who are opposed to busing for other unspecified reasons may adopt certain beliefs about the costs of busing in order to justify their opposition. Analogous rationalizations might be used by busing proponents. The fact that the direction of causality might be opposite of that assumed in our analysis has been noted by the U.S. Commission on Civil Rights (Wall). If this possibility were true, the question of what causes opposition to busing would still need to be answered. The Commission, as well as others, implied that the reason may be opposition to integration. However,

we have noted that Kelley found little or no relationship between attitudes toward integration and opposition or support of busing. Our findings are consistent with those of Kelley. Thus, we feel that those who may question our causal assumptions must look for explanations other than opposition to integration. Regardless of one's theoretical biases, this study does focus attention on a set of rather concrete beliefs that should be taken into account by those seeking a better understanding of a controversial public policy issue.

FOOTNOTES

1. Giles et al. did perform a multivariate analysis but their study pertained to anti-busing protest activity and not to attitudes. Since their findings are rather complex and not directly related to the focus of this paper, their findings will not be discussed.

2. Many of the correlations reported by Stockton and Wayman between busing and various social and political attitudes are comparable in magnitude to our correlations for the single busing item, although not for the busing scale. However, Stockton and Wayman use Kendall's Tau B instead of the Pearsonian product moment correlation which we use. Our experience indicates that if they had computed Pearsonian correlations, the magnitudes would be appreciably smaller, and thus the correlations of our attitude items with the single busing item would generally be larger than those of Stockton and Wayman.

3. We have tested to see if race interacts with the other independent variables. For the anti-busing scale, there were no significant racial interactions. Thus, we cannot conclude that the effects of the independent variables are different for blacks and whites. With respect to the single busing item, there were three significant racial interactions out of the sixteen independent variables for which tests were conducted. Since we are primarily concerned with the results for the busing scale, these interactions will not be discussed.

4. The failure to find such an association is not due to the fact that we have dichotomized this independent variable. When the full five point scale was used in a separate analysis of whites only, there was no significant zero-order or partial relationship with busing.

Table 1. Correlations of Anti-Busing Item and Anti-Busing Scale with Independent Variables.*

Independent Variables	Busing Item	Busing Scale
1. Busing would increase costs a great amount	.24	.35
2. Walking is safer than busing	.11	.26
3. Bused children would be very upset	.24	.32
4. Worry a lot about bused children's safety	.27	.31
5. Busing would hurt the education of whites	.18	.34
6. Busing would improve the education of blacks	.24	-.30
7. Busing would help races get along better	-.22	-.41
8. Officials to blame for school segregation	-.11	-.11
9. Black schools not as good as white schools	-.13	-.19
10. Schools at fault for blacks not doing as well	-.17	-.20
11. Neighborhood schools are best	.29	.38
12. Communities should decide when to desegregate	.22	.28
13. Send children to schools with blacks?		
a. Would not object to more than half	.05	.12
b. Would object to more than half	.17	.12
14. Children in public schools?		
a. white schools	.13	.20
b. black schools	-.15	-.10
15. Education	.05	.05
16. Income	.08	.14

*Pairwise deletion of missing values. N = 218 for all correlations except those involving income, in which case N = 190. With df = 200, $r = .14$ is significant at the .05 level.

Table 2. Standardized Regression Coefficients for the General Anti-Busing Item and the Anti-Busing Scale Regressed on the Independent Variables.

Independent Variables	Busing Item	Busing Scale
1. Busing would increase costs a great amount	.09	.15**
2. Walking is safer than busing	-.08	.00
3. Bused children would be very upset	.08	.13*
4. Worry a lot about bused children's safety	.15*	.07
5. Busing would hurt the education of whites	.05	.12*
6. Busing would improve the education of blacks	-.09	-.04
7. Busing would help races get along better	-.04	-.20**
8. Officials to blame for school segregation	-.06	-.03
9. Black schools not as good as white schools	-.02	-.09
10. Schools at fault for blacks not doing as well	-.08	-.07
11. Neighborhood schools are best	.16**	.21**
12. Communities should decide when to desegregate	.06	.10
13. Send children to schools with blacks?		
a. Would not object to more than half	-.02	.07
b. Would object to more than half	.06	.02
14. Children in public schools?		
a. white schools	.00	.06
b. black schools	-.02	.06
15. Education	-.02	-.02
16. Income	.08	.15**
N	190	190
R	.44	.65
R ²	.19	.42
Adjusted R ²	.11	.36

* one-tailed $p < .05$

**two-tailed $p < .05$

References

- Allport, Gordon W. 1954. The nature of Prejudice. Garden City: Doubleday Anchor Books.
- Cohen, Jacob and Patricia Cohen. 1975 Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences. New York: Halstead Press.
- Gallup, George H. 1972. The Gallop Poll: Public Opinion 1935-1971. New York: Random House.
- Giles, Michael W., Douglas S. Gatlin and Everett F. Cataldo. 1976. "Racial and Class Prejudice: Their Relative Effects on Protest Against School Desegregation." American Sociological Review 41 (April): 280-288.
- Harris Survey Yearbook of Public Opinion. a: 1970. New York: Louis Harris and Associates, 1971.
- _____ b: 1972. New York: Louis Harris and Associates, 1976.
- Kelley, Jonathon. 1974. "The Politics of School Busing." Public Opinion Quarterly 38 (Spring): 23-29.
- Nicoletti, John A. and Tom W. Patterson. 1974. "Attitudes Towards Busing as a Means of Desegregation." Psychological Reports 35 (August): 371-376
- National Opinion Research Center. a: 1972. Codebook for the Spring 1972 General Social Survey. Chicago: National Opinion Research Center.
- _____ b: 1977. Codebook for the Spring 1977 General Social Survey. Chicago: National Opinion Research Center.
- Official Akron City Directory. 1978. Akron: Burch Directory Co.
- Rich, Clyde L. 1977. "Is Random Digit Dialing Really Necessary?" Journal of Marketing Research XIV (August): 300-5.
- St. John, Nancy. 1975. School Desegregation Outcomes for Children. New York: Wiley.
- Stockton, Ronald R. and Francis W. Wayman. 1976. "The Busing Issue and Social Change." The Michigan Academician 81 (Spring): 441-455.
- Taylor, Garth D., Paul B. Sheatsley and Andrew W. Greeley. 1978. "Attitudes Towards Racial Integration." Scientific American 238 (June): 42-49

U. S. Commission On Civil Rights. 1973. "Public Knowledge and Busing Opposition: An Interpretation of a New National Survey." Washington: Government Printing Office.

Wall, Marvin. 1973. "What the Public Doesn't Know Hurts." Civil Rights Digest 5 (Summer): 23-27